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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,228	02/26/2002	Satoshi Tatsuura	106200.01	4600

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Oliff & Berridge PLC
P.O. Box 19928
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EXAMINER

WONG, EDNA

ART UNIT PAPER NUMBER

1753

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,228

Applicant(s)

TATSUURA ET AL.

Examiner

Edna Wong

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-9, 11, 12, 14, 16, 18, 20, 21, 23, 24, 26 and 28-31 is/are pending in the application.
- 4a) Of the above claim(s) 5-9, 11, 12, 14, 16, 18, 20, 21, 23, 24, 26, 28 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 30 and 31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/571,864.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2/26/02.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

Election/Restrictions

Applicant's election with traverse of Group **III**, claims **30 and 31**, in the Response dated January 8, 2004 is acknowledged. The traversal is on the ground(s) that the search and examination of the entire application could be made without a serious burden. This is not found persuasive because:

Group I is directed to a method that requires the steps of metal plating and etching.

Group II is directed to a method that requires the steps of etching and metal plating.

Group III is directed to an apparatus that does not require etching means.

Therefore, the methods as claimed can be practiced by a different apparatus, and the apparatus as claimed can be used to practice another and materially different process such as x-ray generation.

The requirement is still deemed proper and is therefore made FINAL.

Accordingly, claims **5-9, 11-12, 14, 16, 18, 20-21, 23-24, 26 and 28-29** are withdrawn from consideration as being directed to a non-elected invention.

Specification

The disclosure is objected to because of the following informalities:

page 1, line 1, a cross-reference to the related application, SN 09/571,864, filed on May 16, 2000, which is now US Patent No. 6,356,027, should be inserted into the

specification. See 37 CFR 1.78 and MPEP § 201.11.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

I. Claims **30 and 31** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30

line 12, "the laser-irradiated part" lacks antecedent basis. It is suggested that the words -- a part -- should be inserted after the word "irradiating" in claim 30, line 9. See also claim 30, lines 13-14.

II. Claims **30 and 31** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: an electrochemical cell and/or electrodes.

The preamble of the claim 30, line 1, recites "an apparatus for electrodeposited film formation". However, the body of claim 30, lines 3-14, does not recite an electrochemical cell and/or electrodes for the electrodeposition.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **30 and 31** are rejected under 35 U.S.C. 102(b) as being anticipated by **Rentzepis et al.** (US Patent no. 5,426,686).

Rentzepis teaches an apparatus comprising:

- (a) an electrolyte solution bath **40**;
- (b) a laser device **21** for irradiating with a pulse laser whose pulse width is less than a picosecond (= 20 picosecond) [col. 6, lines 41-48; col. 8, lines 35-51; and Fig. 1];
- (c) an opposite electrode **43** (= anode) held separated from a photocathode **42** (col. 9, lines 25-41; and Figs. 1-3); and
- (d) a power source **60** for applying a bias voltage between the photocathode **42** and the opposite electrode **43** (col. 10, lines 41-48; and Fig. 1).

As to the claim limitations of:

- (i) "for electrodeposited film formation" (*the intended use*);
- (ii) "in which an electrolyte solution containing ions to constitute an electrodeposited film is held and wherein an object to be treated of which at least the surface permits generation of charged particles when irradiated with a laser

beam and onto which the electrodeposited film is to be deposited is held" (*the reactant and the substrate*);

(iii) "the object to be treated positioned in the electrolyte solution" (*the reactant and the substrate*);

(iv) "to thereby excite electrons in the laser-irradiated part to cause the electrodeposited film to be formed in the laser-irradiated part" (*the operation of the apparatus*); and

(v) "the object to be treated in the electrolyte solution" (*the reactant and substrate*),

these claim limitations does not structurally distinguish the apparatus from the prior art.

Citations

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Melcher et al. (US Patent No. 4,217,183) is cited to teach an apparatus for electrodeposited film formation. Melcher teaches that the laser beam was pulsed by mechanical chopping for 0.3 ms (col. 5, Example II).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (571) 272-

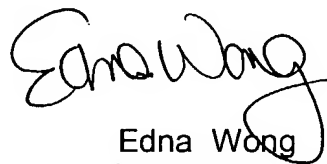
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1349. The examiner can normally be reached on Mon-Fri 7:30 am to 5:00 pm, alt.

Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (572) 272-1300.



Edna Wong
Primary Examiner
Art Unit 1753

EW
January 22, 2004